



## Complete Summary

### TITLE

Prostate cancer: percentage of patients, regardless of age, with a diagnosis of clinically localized prostate cancer receiving external beam radiotherapy as primary therapy to the prostate with or without nodal irradiation (no metastases; no salvage therapy) who receive three-dimensional conformal radiotherapy (3D-CRT) or intensity modulated radiation therapy (IMRT).

### SOURCE(S)

American Urological Association, Physician Consortium for Performance Improvement®. Prostate cancer physician performance measurement set. Chicago (IL): American Medical Association (AMA); 2007 Jun. 30 p. [2 references]

### Measure Domain

#### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

#### SECONDARY MEASURE DOMAIN

Does not apply to this measure

### Brief Abstract

#### DESCRIPTION

This measure is used to assess the percentage of patients, regardless of age, with a diagnosis of clinically localized prostate cancer receiving external beam radiotherapy as primary therapy to the prostate with or without nodal irradiation (no metastases; no salvage therapy) who receive three-dimensional conformal radiotherapy (3D-CRT) or intensity modulated radiation therapy (IMRT).

#### RATIONALE

Current computer-aided radiotherapy techniques improve the precision of the irradiation of cancerous tissue and should be employed for all patients receiving external beam radiotherapy as primary therapy to the prostate.\*

\*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Three-dimensional conformal radiotherapy (3D-CRT) or intensity-modulated radiation therapy (IMRT) techniques should be employed over conventional techniques. These techniques use computer software to integrate computed tomography (CT) images of the patients' internal anatomy in the treatment position, which allows the volume receiving the high radiation dose to "conform" more exactly to the shape of the tumor. Three-dimensional CRT has reduced both acute and late normal tissue toxicity in patients with prostate cancer and allows higher cumulative doses to be delivered with a lower risk of late effects. (National Comprehensive Cancer Network [NCCN])

## **PRIMARY CLINICAL COMPONENT**

Prostate cancer; external beam radiotherapy; three-dimensional conformal radiotherapy (3D-CRT); intensity-modulated radiation therapy (IMRT)

## **DENOMINATOR DESCRIPTION**

All patients, regardless of age, with a diagnosis of clinically localized prostate cancer receiving external beam radiotherapy as primary therapy to the prostate with or without nodal irradiation (no metastases; no salvage therapy)

## **NUMERATOR DESCRIPTION**

Patients who receive three-dimensional conformal radiotherapy (3D-CRT) or intensity-modulated radiation therapy (IMRT)

## **Evidence Supporting the Measure**

### **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

## **Evidence Supporting Need for the Measure**

### **NEED FOR THE MEASURE**

Unspecified

## **State of Use of the Measure**

### **STATE OF USE**

Current routine use

### **CURRENT USE**

Internal quality improvement  
National reporting

## Application of Measure in its Current Use

### **CARE SETTING**

Ambulatory Care  
Physician Group Practices/Clinics

### **PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Physicians

### **LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Individual Clinicians

### **TARGET POPULATION AGE**

All patients, regardless of age

### **TARGET POPULATION GENDER**

Male (only)

### **STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

## Characteristics of the Primary Clinical Component

### **INCIDENCE/PREVALENCE**

Unspecified

### **ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

### **BURDEN OF ILLNESS**

Unspecified

### **UTILIZATION**

Unspecified

### **COSTS**

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Getting Better

### IOM DOMAIN

Effectiveness

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

All patients, regardless of age, with a diagnosis of clinically localized prostate cancer receiving external beam radiotherapy as primary therapy to the prostate with or without nodal irradiation (no metastases; no salvage therapy)

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

All patients, regardless of age, with a diagnosis of clinically localized prostate cancer receiving external beam radiotherapy as primary therapy to the prostate with or without nodal irradiation (no metastases; no salvage therapy)

#### Exclusions

None

### RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

### DENOMINATOR (INDEX) EVENT

Clinical Condition  
Encounter  
Therapeutic Intervention

### DENOMINATOR TIME WINDOW

Time window brackets index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Patients who receive three-dimensional conformal radiotherapy (3D-CRT) or intensity-modulated radiation therapy (IMRT)

### **Exclusions**

None

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## **NUMERATOR TIME WINDOW**

Episode of care

## **DATA SOURCE**

Administrative data  
Medical record

## **LEVEL OF DETERMINATION OF QUALITY**

Individual Case

## **PRE-EXISTING INSTRUMENT USED**

Unspecified

## **Computation of the Measure**

## **SCORING**

Rate

## **INTERPRETATION OF SCORE**

Better quality is associated with a higher score

## **ALLOWANCE FOR PATIENT FACTORS**

Unspecified

## **STANDARD OF COMPARISON**

Internal time comparison

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

### ORIGINAL TITLE

Measure #6: three-dimensional radiotherapy.

### MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

### MEASURE SET NAME

[Prostate Cancer Physician Performance Measurement Set](#)

### SUBMITTER

American Medical Association on behalf of the American Urological Association and Physician Consortium for Performance Improvement®

### DEVELOPER

American Urological Association  
Physician Consortium for Performance Improvement®

### FUNDING SOURCE(S)

Unspecified

### COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

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## **FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

Conflicts, if any, are disclosed in accordance with the Physician Consortium for  
Performance Improvement® conflict of interest policy.

## **ENDORSER**

National Quality Forum

## **INCLUDED IN**

Ambulatory Care Quality Alliance  
Physician Quality Reporting Initiative

## **ADAPTATION**

Measure was not adapted from another source.

## **RELEASE DATE**

2007 Jun

## **MEASURE STATUS**

This is the current release of the measure.

## **SOURCE(S)**

American Urological Association, Physician Consortium for Performance  
Improvement®. Prostate cancer physician performance measurement set.  
Chicago (IL): American Medical Association (AMA); 2007 Jun. 30 p. [2 references]

## **MEASURE AVAILABILITY**

The individual measure, "Measure #6: Three-Dimensional Radiotherapy," is published in the "Prostate Cancer Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: [www.physicianconsortium.org](http://www.physicianconsortium.org).

For further information, please contact AMA staff by e-mail at [cqi@ama-assn.org](mailto:cqi@ama-assn.org).

## **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on November 3, 2008. The information was verified by the measure developer on December 4, 2008.

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